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Applicant: Robert E. Callies et al.

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Art Unit 3752

For: DISTRIBUTION TUBE ASSEMBLY
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RESPONSE

In response to the Office Action of August 13, 2004, applicants note and appreciate the continued indication that claims 10-12 and 20 would be allowable if rewritten in independent form. However, applicants respectfully request reconsideration for the reasons stated below. This application includes claims 1-29 with claims 26-29 having been withdrawn as directed to a non-elected invention.

As to the 102 rejection of independent claims 1 and 16 over the water sprinkling device of Hane 4,162,041, it is respectfully believed that this rejection should be withdrawn. In Hane '041, the water sprinkling device 1 consists of a plurality of main pipes 2 and sub-pipes 3 connected by two types of sockets 4 and 5. Hane's sockets 4 (as shown in Fig. 3) are positioned

at the outer boundary end of the sub-pipe 3 and the intermediate sockets 5 (as shown in Fig. 5) connect adjacent sub-pipes 3.

In contrast to claim 1, the water sprinkling device 1 does not define at least two fluid passageways throughout the length of the device 1. The end sockets 4 close off the outer boundary ends of the sub-pipes 3 to any fluid flow so that there is not more than one fluid stream through the device 1. The sub-pipes 3 are merely extensions or branches of the same fluid stream defined by the main pipe 2 and do not define a second fluid passageway.

Applicants emphasize that Hane's sub-pipes 3 do not permit fluid flow from the upstream end of the water sprinkling device 1 to the downstream end of the device. For example in Fig. 1, water does not flow from the closed off end socket 4 at the leftward most position of the sub-pipes 3. As clearly shown in Fig. 3, the end socket 4 has a closure part 12 which "shuts off the passage of fluid flow" (column 6, lines 44-45). Fig. 1 shows other end sockets 4 positioned along the device 1 which similarly have a closure part 12 which shuts off fluid flow. Hane clearly teaches that the sub-pipes are sub-divisions of the same passageway defined by the main pipes 2. Water feeds into the sub-pipes 3 from the main pipe 2 at the socket 5 and then branches either left or right, relative to Fig. 5, into the sub-pipes and consequently flows out of the numerous spurting holes defined in the sub-pipes (col. 7, lines 46-48). In contrast, claim 1 includes at least two passageways, each of which permit fluid flow from the first upstream end to the second downstream end of the frame. For these reasons, claim 1 is respectfully believed to be distinguishable over Hane '041.

In addition, claim 1 is further distinguishable over Hane '041 for another reason. Hane '041 does not teach or suggest that at least one of the fluid passageways is in fluid

communication with the main supply line and at least another of the fluid passageways is in fluid communication with a second fluid supply line. In Hane '041, the plurality of main pipes 2 and sub-pipes 3 are all in fluid communication with a single fluid supply line or master pipe 7 (see Figure 1). Hane '041 lacks any disclosure of a second fluid supply line, as required by claim 1.

Contrary to the comments expressed in the Office Action, the reference number 18 in Hane '041 does not identify a second fluid supply line. Rather, it identifies a hole 18 formed on the inside of the intermediate socket 5 (See Figures 5 and 6; col. 6, lines 61-67). The hole 18 merely permits fluid flow from the main pipe 2 to the branches or sub-pipes 3. In Fig. 5, fluid from the main pipe 2 enters the hole 18 and is permitted to flow left or right into the sub-pipes 3, provided the two pairs of holes 15, 15 and 19, 19 are aligned to permit such flow. Hane '041 teaches that the hole 18 is always in fluid communication with the same fluid supply line or master pipe 7 as the main pipe 2. Hane does not teach or suggest that the hole 18 communicates with any other fluid supply line. Thus, Hane '041 fails to provide any teaching or suggestion of the subject matter of claim 1.

Applicants now turn to the 102 rejection of independent claim 1 over the water drip device of Dunn 4,763,842. In Dunn '842, the water drip device 10 comprises a supply channel 22 constructed of plastic tape 11 having sides 18 and 20 which are joined together and sealed. The tape 11 includes segmented pressure channels 30 positioned above the supply channel 22. Each pressure channel 30 is supplied with water from the supply channel 22 through a separate opening 26. Dunn's water drip device allows water from the supply channel 22 to flow into each pressure channel 30 and exit a respective water outlet 36. Similar to Hane '041, Dunn's pressure channels 30 are merely sub-divisions or branches from the same supply

channel 22 so that Dunn '842 does not teach or suggest anything further than Hane '041.

In Figure 1 of Dunn '842, water from the supply channel 22 flows through the opening 26 to the pressure channel 30 and then is directed left (see Figure 1) to flow out of the outlet 36. Dunn merely teaches a single fluid pathway which is defined by both channels 22 and 30. The section of the watering device 10 shown in Figure 1 shows one complete pressure channel 30 and part of another pressure channel 30. Clearly, no one pressure channel 30 discloses or suggests a second passageway which permits fluid flow from the upstream end to the downstream end of the watering device 10. Rather, each pressure channel 30 is fluidly disjointed from each other pressure channel 30 along the length of the device 10 and is separated from another pressure channel 30 by an invented V-shaped stabilizer cavity 38. It would not be obvious to connect the fluidly disjointed pressure channels 30 and eliminating the cavity 38 because Dunn's water drip device would fail for its intended purpose. Dunn explains that the cavity 38 is necessary to prevent collapse or restriction of water flow through the pressure channels 30 (col. 3, lines 60-66). Dunn's supply channel 22 and pressure channel 30 thus do not define first and second passageways where each passageway permits a fluid stream to flow from an upstream end of the water drip device 10 to the downstream end of the water drip device.

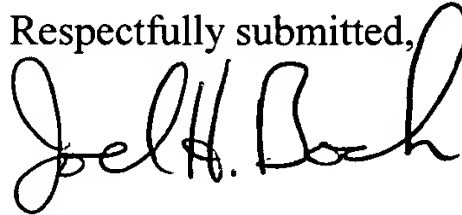
Dunn '842 is respectfully believed to be distinguishable for the reasons discussed above as well as another reason. Dunn '842 teaches that both the supply channel 22 and the pressure channel 30 are connected to a single pressurized water source (Col. 5, lines 6-7). No other fluid supply is mentioned in Dunn '842. In contrast to the Office Action, the openings 26 do not constitute a second fluid supply line. Rather, the openings 26 are supplied by the same supply line as that of the supply channel 22. Water can only enter the opening 26 to the pressure

channel 30 after the water has passed through the supply channel 22 and all water in the supply channel 22 is supplied by the same pressurized water source. There is no expressed or implied teaching in Dunn '842 of any second fluid supply line. Therefore, Dunn '842 lacks essential features of claim 1, similar to the above discussion with respect to Hane '041.

Claim 16 is respectfully believed to be distinguishable over the cited references of Hane '041 or Dunn '842 for similar reasons as discussed above relative to claim 1. Further, claims 2-15 and 17-25, respectively, depend either directly or indirectly from claims 1 and 16 and also should be allowable. Therefore, it is believed that the cited references are wholly unlike applicants' claimed distribution tube assembly and cannot anticipate or render it obvious.

Claims 1-25 are now respectfully believed to be distinguishable over the cited references. Reconsideration and allowance of these claims is respectfully requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Joel H. Bock". The signature is fluid and cursive, with the first name "Joel" being the most prominent.

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